

Serial Number: 09/998,284

ENTERED

- ☐ Changed a file from non-ASCII to ASCII
- ☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.
- ☐ Edited a format error in the Current Application Data section, specifically: _____
- ☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other _____
- ☐ Added the mandatory heading and subheadings for "Current Application Data".
- ☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
- ☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically: _____
- ☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: _____
- ☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: _____
- ☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
- ☐ Inserted colons after headings/subheadings. Headings edited included: _____
- ☐ Deleted extra, invalid, headings used by an applicant, specifically: _____
- ☒ Deleted: ☒ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as _____
- ☐ Inserted mandatory headings, specifically: _____
- ☐ Corrected an obvious error in the response, specifically: _____
- ☐ Edited identifiers where upper case is used but lower case is required, or vice versa.
- ☐ Corrected an error in the Number of Sequences field, specifically: _____
- ☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
- ☐ Deleted ending stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____
- ☐ Other: _____

Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

OIPE

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/998,284

DATE: 12/11/2001
 TIME: 17:00:33

Input Set : A:\PTO.AMC.txt
 Output Set: N:\CRF3\12112001\I998284.raw

#2.

3 <110> APPLICANT: POULSEN, et al.
 5 <120> TITLE OF INVENTION: COMPOSITION
 7 <130> FILE REFERENCE: 674509-2035
 C--> 9 <140> CURRENT APPLICATION NUMBER: US/09/998,284
 C--> 9 <141> CURRENT FILING DATE: 2001-11-30
 9 <150> PRIOR APPLICATION NUMBER: PCT/IB00/00829
 10 <151> PRIOR FILING DATE: 2000-06-02
 12 <150> PRIOR APPLICATION NUMBER: GB 9913050.2
 13 <151> PRIOR FILING DATE: 1999-06-04
 15 <160> NUMBER OF SEQ ID NOS: 2
 17 <170> SOFTWARE: PatentIn version 3.1
 19 <210> SEQ ID NO: 1
 20 <211> LENGTH: 1644
 21 <212> TYPE: DNA
 22 <213> ORGANISM: Chondrus crispus
 24 <400> SEQUENCE: 1
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 27 ccagacaagc ctgacccaag attgccatcc atgaagcaag gtttcaacag aagatggatt 120
 29 ggtaccaaca tcgatttcgt ttacgtcgtt tacactccac aaggtgcttg tactgctttg 180
 31 gacagagcta tggaaaagtg ttctccaggt accgtcagaa tcgtttcttg tggtcactgt 240
 33 tacgaagact tcgttttcga cgaatgtgtc aaggctatta tcaacgttac tggtttggtt 300
 35 gaatctggtt acgacgacga tagaggttac ttctctctt ccggtgacac caactggggt 360
 37 tccttcaaga ccttgttcag agaccacggt agagttttgc caggtgggtc ctgttactcc 420
 39 gtcggttttg gtggtcacat tgcggtgga ggtgacggt ttttgccag attgcacggt 480
 41 ttgccagtcg attggttatc cggtgttgaa gttgtcgtta agccagtctt gaccgaagac 540
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 45 cacactggtg gaggtggagg taacttcggt attatcacca aatactactt caaggatttg 660
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 49 agagatgcct tgcaagattt gttgactaag tacttcaagt tggctagatg tgattggaag 780
 51 aatactgttg gtaagttcca aatcttccac caagcagctg aagagtttgt tatgtacttg 840
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 71 tatgagcctt atggtggtgt tccagaccct aacactcagg ttgagagtgg taaagggtgt 1440
 73 tttgagggat gctacttcaa ctaccctgat gttgacttga acaactggaa gaacggtaag 1500
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 79 gagcctaagc agactaaata gtag 1644
 82 <210> SEQ ID NO: 2
 83 <211> LENGTH: 546
 84 <212> TYPE: PRT

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85 <213> ORGANISM: Chondrus crispus

87 <400> SEQUENCE: 2

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89 Met Ala Thr Leu Pro Gln Lys Asp Pro Gly Tyr Ile Val Ile Asp Val
90 1          5          10          15
93 Asn Ala Gly Thr Pro Asp Lys Pro Asp Pro Arg Leu Pro Ser Met Lys
94          20          25          30
97 Gln Gly Phe Asn Arg Arg Trp Ile Gly Thr Asn Ile Asp Phe Val Tyr
98          35          40          45
101 Val Val Tyr Thr Pro Gln Gly Ala Cys Thr Ala Leu Asp Arg Ala Met
102          50          55          60
105 Glu Lys Cys Ser Pro Gly Thr Val Arg Ile Val Ser Gly Gly His Cys
106 65          70          75          80
109 Tyr Glu Asp Phe Val Phe Asp Glu Cys Val Lys Ala Ile Ile Asn Val
110          85          90          95
113 Thr Gly Leu Val Glu Ser Gly Tyr Asp Asp Asp Arg Gly Tyr Phe Val
114          100          105          110
117 Ser Ser Gly Asp Thr Asn Trp Gly Ser Phe Lys Thr Leu Phe Arg Asp
118          115          120          125
121 His Gly Arg Val Leu Pro Gly Gly Ser Cys Tyr Ser Val Gly Leu Gly
122          130          135          140
125 Gly His Ile Val Gly Gly Gly Asp Gly Ile Leu Ala Arg Leu His Gly
126 145          150          155          160
129 Leu Pro Val Asp Trp Leu Ser Gly Val Glu Val Val Val Lys Pro Val
130          165          170          175
133 Leu Thr Glu Asp Ser Val Leu Lys Tyr Val His Lys Asp Ser Glu Gly
134          180          185          190
137 Asn Asp Gly Glu Leu Phe Trp Ala His Thr Gly Gly Gly Gly Gly Asn
138          195          200          205
141 Phe Gly Ile Ile Thr Lys Tyr Tyr Phe Lys Asp Leu Pro Met Ser Pro
142          210          215          220
145 Arg Gly Val Ile Ala Ser Asn Leu His Phe Ser Trp Asp Gly Phe Thr
146 225          230          235          240
149 Arg Asp Ala Leu Gln Asp Leu Leu Thr Lys Tyr Phe Lys Leu Ala Arg
150          245          250          255
153 Cys Asp Trp Lys Asn Thr Val Gly Lys Phe Gln Ile Phe His Gln Ala
154          260          265          270
157 Ala Glu Glu Phe Val Met Tyr Leu Tyr Thr Ser Tyr Ser Asn Asp Ala
158          275          280          285
161 Glu Arg Glu Val Ala Gln Asp Arg His Tyr His Leu Glu Ala Asp Ile
162          290          295          300
165 Glu Gln Ile Tyr Lys Thr Cys Glu Pro Thr Lys Ala Leu Gly Gly His
166 305          310          315          320
169 Ala Gly Trp Ala Pro Phe Pro Val Arg Pro Arg Lys Arg His Thr Ser
170          325          330          335
173 Lys Thr Ser Tyr Met His Asp Glu Thr Met Asp Tyr Pro Phe Tyr Ala
174          340          345          350
177 Leu Thr Glu Thr Ile Asn Gly Ser Gly Pro Asn Gln Arg Gly Lys Tyr
178          355          360          365
181 Lys Ser Ala Tyr Met Ile Lys Asp Phe Pro Asp Phe Gln Ile Asp Val

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182	370	375	380
185	Ile Trp Lys Tyr Leu Thr	Glu Val Pro Asp Gly	Leu Thr Ser Ala Glu
186	385	390	395 400
189	Met Lys Asp Ala Leu Leu	Gln Val Asp Met Phe	Gly Gly Glu Ile His
190	405	410	415
193	Lys Val Val Trp Asp Ala Thr	Ala Val Ala Gln Arg	Glu Tyr Ile Ile
194	420	425	430
197	Lys Leu Gln Tyr Gln Thr Tyr	Trp Gln Glu Glu Asp	Lys Asp Ala Val
198	435	440	445
201	Asn Leu Lys Trp Ile Arg Asp	Phe Tyr Glu Glu Met	Tyr Glu Pro Tyr
202	450	455	460
205	Gly Gly Val Pro Asp Pro	Asn Thr Gln Val Glu	Ser Gly Lys Gly Val
206	465	470	475 480
209	Phe Glu Gly Cys Tyr Phe	Asn Tyr Pro Asp Val	Asp Leu Asn Asn Trp
210	485	490	495
213	Lys Asn Gly Lys Tyr Gly	Ala Leu Glu Leu Tyr	Phe Leu Gly Asn Leu
214	500	505	510
217	Asn Arg Leu Ile Lys Ala	Lys Trp Leu Trp Asp	Pro Asn Glu Ile Phe
218	515	520	525
221	Thr Asn Lys Gln Ser Ile	Pro Thr Lys Pro Leu	Lys Glu Pro Lys Gln
222	530	535	540
225	Thr Lys		
226	545		

VERIFICATION SUMMARY

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L:9 M:270 C: Current Application Number differs, Replaced Current Application No

L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date